ALIENWARE® M15x
COMPREHENSIVE SPECIFICATIONS

The contents herein are subject to change without notice.

Model: P08G   Type: P08G001   September 2009

COMPREHENSIVE SPECIFICATIONS

Computer Model

Alienware M15x

Dimensions

Height	48.7 mm (1.92 inches) - Front and Back
Width	377.93 mm (14.88 inches)
Depth	308.51 mm (12.15 inches)
Weight with 6-cell battery (starting at)	4.08 kg (9.00 lb) **NOTE**: The weight of your laptop will vary depending on the configuration ordered and the manufacturing variability.

Processor and System Chipset

Processor	Intel® Core™ i7
L2 Cache	256 KB
L3 Cache	up to 8 MB
Bus clock	133 MHz
System chipset	Mobile Intel PM55
SDRAM bus width	one or two 64-bit channels of DDR3 memory up to 1333MHz

Processor and System Chipset

Processor address bus width	32 bits
Processor data width	64 bits
BIOS EPROM	16 Mbit
Graphics bus	PCIe x16 bus supporting x16 PCIe MXM 3.0 graphics cards
PCI bus	32 bits

Memory

Connectors	two internally-accessible SODIMM sockets
Capacities	1 GB, 2 GB, and 4 GB modules
Memory types	1067 MHz and 1333 MHz DDR3
Memory configurations possible	2 GB, 3 GB, 4 GB, and 8 GB

ExpressCard

Interface	supports PCIe and USB 2.0
Connector	one 26-pin ExpressCard slot (54 mm)
Cards supported	ExpressCard/34 (34 mm) ExpressCard/54 (54 mm)

IEEE 1394/Media Card

IEEE 1394/Media Card controller	Ricoh R5C833
IEEE 1394 interface	compliant with standard IEE1394a-2000 specification
Media Card formats supported	▪ Secure Digital (SD) memory card ▪ Secure Digital High Capacity (SDHC) card ▪ Secure Digital Input/Output (SDIO) card ▪ Multi Media Card (MMC) ▪ Memory Stick ▪ Memory Stick PRO ▪ xD-Picture Card (type - M and type - H) ▪ Hi Density-SD (SDHD)

Ports and Connectors

IEEE 1394 A	one 4-pin serial connector
Network adapter	one RJ45 connector 10/100/1000 Mbps
USB	three 4-pin USB 2.0-compliant connectors, including one through eSATA/USB combo connector
eSATA	one through eSATA/USB combo connector
VGA	one 15-hole connector
DisplayPort	one 20-pin connector
Audio	one microphone connector, two stereo headphone/speaker connectors
ExpressCard	one ExpressCard/54 connector
8-in-1 Media Card Reader	one combo connector

Communications

Network adapter	10/100/1000 Mbps Ethernet LAN on system board
Wireless	▪ WLAN Mini-Card (Half Mini-Card slot) ▪ WPAN, Bluetooth® card (Full Mini-Card slot)

Video

LCD interface	Low Voltage Differential Signaling (LVDS)
External display support	VGA and DisplayPort
Video cards	MXM 3.0 Type B compliant cards with individual power budget of 35W and 65W

Audio

Type	High-Definition 5.1 Surround Sound Audio
Controller	IDT 92HD83
Stereo conversion	24-bit (analog-to-digital and digital-to-analog)
Speaker	dual 8-ohms speakers in both the left and right speaker assembly
Internal speaker amplifier	up to 2 W per channel; up to 4 W total power
Internal microphone support	dual digital-array microphones in the display assembly
Volume controls	program menus and media control buttons
Audio connectors	two audio output/headphone connectors and one audio input/microphone connector The audio input/microphone connector also functions as an output connector in a 5.1-channel surround-sound speaker setup

Camera

Pixel	2.0 megapixel
Video resolution	320 x 240 - 1600 x 1200 (640 x 480 at 30 fps)
Diagonal viewing angle	66°

Optical-Drive Storage

Interface	SATA
Type	slot-load drive
Drives supported	Blu-ray Disc™ combo, Blu-ray Disc Writer, or DVD+/-RW

Hard-Drive Storage

Interface	SATA
Number of hard drives	one
Type	standard portable and solid-state hard-drives

Display

Type (WLED)	▪ 15.6 inch HD+ (1600 x 900) ▪ 15.6 inch FHD (1920 x 1080)
Refresh Rate	60 Hz
Operating angle	0° (closed) to 140°
Pixel pitch	0.2550 mm
Controls	brightness can be controlled through keyboard shortcuts

Keyboard (Backlit)

Layouts	U.S. and Canada; Europe; Japan
Backlight color	RGB; colors can be changed by invoking the AlienFX® application in the Alienware Command Center. For details, see your *Mobile Manual*

Touch pad

X/Y position resolution (graphics table mode)	240 cpi
Width	71.7-mm (2.8-inches) sensor-active area
Height	34.0-mm (1.3-inches) rectangle

Battery

Type and dimensions

6-cell "smart" lithium ion (57 Whr)

Depth	53.8 mm (2.12 inches)
Height	21.3 mm (0.84 inches)
Width	213 mm (8.39 inches)
Weight	0.33 kg (0.72 lb)

9-cell "smart" lithium ion (86 Whr) (optional)

Depth	53.8 mm (2.12 inches)
Height	36.9 mm (1.45 inches)
Width	330 mm (12.99 inches)
Weight	0.5 kg (1.1 lb)
Voltage	12.6 VDC
Operating time	Battery operating time varies depending on operating conditions and can be significantly reduced under certain power-intensive conditions
Life span (approximate)	300 discharge/charge cycles

Battery

Temperature range	
Operating	0° to 50°C (32° to 122°F)
Storage	–20° to 65°C (–4° to 149°F)
Coin-cell battery	CR-2032

AC Adapter

Type	150 W
Input voltage	100 - 240 VAC
Input current (maximum)	2.5 A
Input frequency	50 - 60 Hz
Output current	7.7 A (continuous)
Output power	150 W
Rated output voltage	19.5 VDC

AC Adapter

Dimensions:	
Height	25.4 mm (1.0 inches)
Width	154.7 mm (6.1 inches)
Length	25.4 mm (1.0 inches)
Weight (without AC power cord)	0.52 kg (1.14 lb)
Temperature range:	
Operating	0° to 35°C (32° to 95°F)
Storage	–40° to 70°C (–40° to 158°F)
Connector types:	
DC connector	3 pin, 7.4 mm plug
AC connector	3 pin - C13

Computer Environment	
Temperature range:	
Operating	0° to 35°C (32° to 95°F)
Storage	–40° to 65°C (–40° to 149°F)
Relative humidity (maximum):	
Operating	10% to 90% (non-condensing)
Storage	10% to 95% (non-condensing)
Maximum vibration (using a random vibration spectrum that simulates user environment):	
Operating	0.66 GRMS
Storage	1.3 GRMS
Maximum shock (Measured with hard drive in operating status and a 2-ms half-sine pulse for operating. Also measured with hard drive in head-parked position and a 2-ms halfsine pluse for storage):	
Operating	110 G
Storage	160 G
Altitude (maximum):	
Operating	–15.2 to 3048 m (–50 to 10,000 ft)
Storage	–15.2 to 10,668 m (–50 to 35,000 ft)
Airborne contaminant level	G2 or lower as defined by ISA-S71.04-1985